

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/602,048	06/24/2003	Michael J. Kopshever SR.	45,024	8142
28309	7590 12/14/2004		EXAMINER	
BOWERS HARRISON LLP			A, PHI DIEU TRAN	
GARY K. PR 25 RIVERSII	•		ART UNIT	PAPER NUMBER
PO BOX 1287			3637	
EVANSVILLE, IN 47706-1287			DATE MAILED: 12/14/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			•
	Application No.	Applicant(s) KOPSHEVER, MICHAEL J.	
	10/602,048		
Office Action Summary	Examiner	Art Unit	
	Phi D A	3637	$ \mathcal{M}_{\mathcal{A}}\rangle$
The MAILING DATE of this communicated Period for Reply	ation appears on the cover sheet w	ith the correspondence	address
• •	D DEDI V IO OET TO EVOIDE • N	10NT11/0N 55014	
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commun. - If the period for reply specified above, the maximum statul. - Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months afte earned patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no event, however, may a rication. days, a reply within the statutory minimum of thin tory period will apply and will expire SIX (6) MON II, by statute, cause the application to become AE	reply be timely filed ty (30) days will be considered t NTHS from the mailing date of th BANDONED (35 U.S.C. § 133).	nis communication
Status	•		
1)⊠ Responsive to communication(s) filed	on 24 June 2004.		
_)⊠ This action is non-final.		
3) Since this application is in condition fo	•	ters, prosecution as to	the merits is
closed in accordance with the practice	under <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1-22</u> is/are pending in the app	olication.		
4a) Of the above claim(s) is/are	withdrawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-22</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction	on and/or election requirement.		
Application Papers			
9) The specification is objected to by the I	Examiner.		
10) The drawing(s) filed on is/are: a	ı) ☐ accepted or b) ☐ objected to	by the Examiner.	
Applicant may not request that any objection	on to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the			
11)☐ The oath or declaration is objected to b	y the Examiner. Note the attached	d Office Action or form	PTO-152.
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:	r foreign priority under 35 U.S.C. §	3 119(a)-(d) or (f).	
1. Certified copies of the priority do			
2. Certified copies of the priority do			
3. Copies of the certified copies of		received in this Nation	nal Stage
application from the Internationa * See the attached detailed Office action to		rossived	
oce the attached detailed Office action i	or a list of the certified copies not	i cociveu.	
Attachment(s)			
1) X Notice of References Cited (PTO-892)	· 4\ \ Intendew \	Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTC)-948) Paper No(s	s)/Mail Date	
 Information Disclosure Statement(s) (PTO-1449 or PT Paper No(s)/Mail Date 		nformal Patent Application (PTO-152)
aper moto/mail Date	6) [] Other:	<u> </u>	

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-2, 5-11, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (6694698) in view of Vanderveer (2327681).

Ryan shows a tower reinforcement apparatus comprising an upper collar assembly (2A, figure 2) parallel with a lower collar assembly (2B, figure 2), the upper assembly is spaced at a selected distance from the lower assembly, a plurality of flat bars (32a-f, 38a-e) attached to the upper and lower collar assemblies, securing means (40s) to attach the upper and lower collar assemblies to a tower, the flat bars being vertically positioned between the upper and lower assemblies, the upper collar assembly comprising first and second upper collars, the first and second upper collars each comprising an upper collar mount plate disposed on opposite ends, the upper collar mount plates of the first upper collar being joined with the upper collar mount plates of the second upper collar to form the upper collar assembly, the lower collar assembly comprising first and second lower collars, the first and second lower collars each comprising a lower collar mount plate disposed on opposite ends, the lower collar mount plates of the first lower collar being joined with the lower collar mount plates of the second lower collar to form the lower collar assembly, the upper and lower collar assemblies being formed to wrap around the tower, the upper and lower assemblies each further comprising a plurality of tab plates (34a) sized to receive the flat bars, the flat bars vertically extend the selected distance between the

upper and lower assemblies, an end of the flat bar is fixedly received by the tab plates, a base flange (12) positioned at lower end of the tower, the flange comprising a plurality of brackets (the openings/slots at the bottom of figure 1) sized to receive the flat bar.

Ryan does not show at least one ring disposed between the upper and lower assemblies, the ring encircles the flat bars and the tower so that the bars being held in compression with the tower.

Vanderveer shows at least one ring (9) disposed between the upper and lower assemblies (17), the ring encircles the flat bars (4) and the tower so that the bars being held in compression with the tower.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ryan's structure to show at least one ring disposed between the upper and lower assemblies, the ring encircles the flat bars and the tower so that the bars being held in compression with the tower because it would enhance the securement of the flat bars to the tower and further compress the bars against the tower as taught by Vanderveer.

Per claim 11, Ryan as modified by Vanderveer shows at least one ring being parallel to the upper and lower assemblies.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (6694698) in view of Vanderveer (2327681) as applied to claim 1 above and further in view of Guilbeault (5974744).

Ryan as modified shows all the claimed limitations except for the securing means comprising a plurality of mounting block having a flat portion that is secured to an outer surface of the tower and an inner surface of the upper or the lower collar assembly.

Guilbeault shows securing means comprising a plurality of mounting blocks (36) having a flat portion that is secured to an outer surface of the tower and an inner surface of the upper or the lower collar assembly to increase the thickness of the securing means.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ryan's modified structure to show the securing means comprising a plurality of mounting block having a flat portion that is secured to an outer surface of the tower and an inner surface of the upper or the lower collar assembly because it would increase the enhance the securing of the assemblies to the tower per the increase in thickness as taught by Guilbeault.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (6694698) in view of Vanderveer (2327681) and Guilbeault (5974744).

Ryan as modified shows all the claimed limitations except for the blocks being secured by welding.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ryan's modified structure to show the blocks being secured by welding because welding, gluing, nailing, screwing, roping etc...are well known means of attaching parts together.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (6694698) in view of Vanderveer (2327681).

Ryan as modified shows all the claimed limitations except for the at least one ring being spaced apart at intervals of approximately two feet.

Page 5

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ryan's modified structure to show the at least one ring being spaced apart at intervals of approximately two feet because it would have been an obvious matter of engineering design choice to have the spacing at approximately two feet as it is up to the designer to select a distance that would provide strong and sufficient compression of the flat bars to the tower.

6. Claims 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ryan (6694698) in view of Vanderveer (2327681) and Guilbeault (5974744).

Ryan shows a tower reinforcement apparatus comprising an upper collar assembly (2A, figure 2) including a plurality of tab plates, a lower collar assembly (2B, figure 2) including a plurality of tab plates, the upper and lower assemblies being parallel, the upper assembly is spaced at a selected distance from the lower assembly, the upper and lower collar assemblies being formed to wrap around the tower, a plurality of flat bars (32a-f, 38a-e) attached to the upper and lower collar assemblies, one end of the flat bars being attached to the upper tab plates. of the upper collar assembly and an opposite end of the flat bar being attached to the lower tab plates of the lower collar assembly, the flat bars being vertically positioned between the upper and lower assemblies, the upper collar assembly comprising first and second upper collars, the first and second upper collars each comprising an upper collar mount plate disposed on opposite ends, the upper collar mount plates of the first upper collar being joined with the upper collar mount plates of the second upper collar to form the upper collar assembly, the lower collar assembly comprising first and second lower collars, the first and second lower collars each comprising a lower collar mount plate disposed on opposite ends, the lower collar mount plates of the first lower collar being joined with the lower collar mount plates of the second lower

collar to form the lower collar assembly, the flat bars vertically extend the selected distance between the upper and lower assemblies, a base flange (12) positioned at lower end of the tower, the flange comprising a plurality of brackets (the openings/slots at the bottom of figure 1) sized to receive the flat bar.

Ryan does not show at least one ring disposed between the upper and lower assemblies, the ring encircles the flat bars and the tower so that the bars being held in compression with the tower, a plurality of mounting blocks between the upper assembly and the tower, and between the lower assembly and the tower.

Vanderveer shows at least one ring (9) disposed between the upper and lower assemblies (17), the ring encircles the flat bars (4) and the tower so that the bars being held in compression with the tower.

Guilbeault shows a plurality of mounting blocks (36) having a flat portion that is secured to an outer surface of the tower and an inner surface of the upper or the lower collar assembly to increase the thickness of the securing means.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Ryan's structures to show at least one ring disposed between the upper and lower assemblies, the ring encircles the flat bars and the tower so that the bars being held in compression with the tower, a plurality of mounting blocks between the upper assembly and the tower, and between the lower assembly and the tower because having the mounting blocks between the upper/lower assembly and the tower would increase the enhance the securing of the assemblies to the tower per the increase in thickness as taught by Guilbeault, and having the

rings would enhance the securement of the flat bars to the tower and further compress the bars against the tower as taught by Vanderveer.

Per claim 21, Ryan as modified by Vanderveer shows at least one ring being parallel to the upper and lower assemblies.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different tower reinforcement apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 703-306-9136. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phi Dieu Tran A

12/10/04